Treatment of Alcoholism

Problems Arising from the Substitution of Other Drugs in Therapy

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• **Of the 139 patients admitted to hospital for chronic alcoholism, 32 had been taking other drugs also, and 17 were addicted to the drugs. Of the 32 patients, 16 used barbiturates, and 8 were addicted. Five took large amounts in suicidal attempt.**

Ten patients combined still other drugs with alcohol and barbiturates; and seven of them were addicted to barbiturates. Of the six patients combining alcohol with drugs other than barbiturates, two were addicted to the use.

Of the 16 patients who used drugs other than barbiturates, eight used one or more opiates such as meperidine, morphine, codeine or dihydromorphinone. Four used stimulants such as benzedrine or dexedrine, alone or in combination. Still other drugs were used in some combination by 32 patients.

WHEN A PHYSICIAN sees an alcoholic it is usually at the request of some member of a frantic family who reports that the patient "is very sick, can't hold anything on his stomach and has bad dreams," and usually the physician is asked to "prescribe something" so that the patient (and the family) can get some rest. The caller feels sure that a good night's sleep will solve the problem. The physician is often reluctant to visit the patient; but pressure from the family and his own conscience necessitate a visit or at least a prescription. The first choice is a sedative drug. Over the phone or in the patient's presence the physician orders a barbiturate, paraldehyde or occasionally another drug calculated to help the patient over the jitters, perhaps relieve or prevent delirium, and help him get along without alcohol.

The next day the relatives again call the physician. The patient has slept a little during the night but is complaining bitterly about an upset stomach and great tremulousness. He is irritable and irascible. He may be threatening to have another drink, or going out to get a new bottle. Can the physician prescribe more of those pills? The patient has just taken the last two and still seems to be unable to settle down. The physician calls the pharmacist and orders a refill of the prescription, for twice the amount.

The next contact with the patient or his relatives is in a few days. The patient has not been drinking or is drinking only a little and is feeling much better, but he still is not quite himself and has trouble sleeping; and tomorrow he has to go back to work.

Somewhat later the patient himself calls and tells how well he is doing. He still cannot sleep, however, and needs a refill of those capsules. After three or four calls within a few weeks the physician may begin to feel that he is being bothered unnecessarily and he may increase the number to 50, 100 or even 150 capsules. (*That* ought to hold the patient for awhile). Or the physician, judging that the patient has had enough drugs, tells him the dangers of drugs and warns him to stop. In the latter case, the patient calls a physician he has seen a few months or years earlier, describes his difficulty in sleeping and says that another doctor prescribed some capsules a while back which really helped. However, that doctor is out of town right now and "Will you please refill the prescription?" This, then, is the beginning of a vicious cycle.

A few months or years later the patient may be seen by a psychiatrist, again as the result of family urging. Members of the family say that lately he has not been drinking but for some reason he acts drunk at times. His speech is slurred and his gait staggering. His boss has complained that the employee shows poor judgment and perhaps should have a vacation or be laid off his job.

In the interview, the psychiatrist observes the conditions reported by the family: The patient staggers into the office but there is no odor of alcohol. He is dysarthric, his memory poor, judgment impaired and cognitive functions slowed.

The patient relates a typical history: He is 39 years old. He had been a social drinker until 12 years ago when he began having marital difficulties, and his drinking then increased considerably. A year or so later, while on a business trip, he woke one morning feeling extremely tremulous and with mild discomfort in the precordium. A physician who was called prescribed "therapeutic doses of barbiturates." During the intervening years, he had consulted many physicians, most of whom cooperated in meeting his requests for sedatives.

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About a year ago, when his regular physician went on a vacation, the patient was referred to another doctor. The second physician apparently got tired of the patient and managed the situation by allowing him unlimited quantities of sedation. During the preceding few months, the patient had been taking 16 to 24 capsules (0.1 gm. each) of pentobarbital a day. In the ten years since he began taking barbiturates, he has continued to be a daily drinker, consuming up to a fifth of whiskey a day. At times he has had spells of unconsciousness, with jerking.

The problem at this point becomes one for hospital management in a psychiatric ward.[3]

In order to clarify a clinical observation that the use of certain drugs in the treatment of alcoholism is potentially dangerous, the author reviewed the records of admissions to the psychiatric department of a general hospital. Of the 139 patients admitted in 1954 with a primary diagnosis of chronic alcoholism, 32 (23 per cent) were taking regularly some drug or combination of drugs in conjunction with alcohol or had substituted drugs for alcohol. Of these, 17 were or had been addicted to one or more of these drugs.

Of the 32 patients, 16 were drinking and taking barbiturates or had substituted barbiturates for alcohol. Eight of the 16 were addicted to barbiturates. Ten additional patients were drinking and also taking barbiturates and some other drugs or had substituted one or more of these drugs for alcohol. Six of the ten were addicted to barbiturates and one to a combination of barbiturate and stimulant (Dexamyl®). Six other patients either combined alcohol with drugs other than barbiturates or had substituted them for alcohol. One of the six was taking 20 to 30 amphetamine tablets (10 mg. each) daily, and another had been successively addicted to paraldehyde, morphine and meperidine (Demerol). (See Table 1.) Although a total of 26 patients (15 of them addicts) used barbiturates, many of the 32 also took opiates such as meperidine, morphine, codeine and dihydromorphinone (Dilaudid). Other drugs used were racemic amphetamine (Benzedrine), dextro-amphetamine (Dexedrine), bromides, paraldehyde and chloral hydrate. Two patients were taking unknown drugs bought over the counter in a drugstore (See Table 2).

Addiction is defined as follows by the Expert Committee on Drugs Liable to Produce Addiction of the World Health Organization: "Drug addiction is a state of periodic or chronic intoxication, detrimental to the individual and to society, produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include: (1) an overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means, (2) a tendency to increase the dose and (3) a psychic and sometimes a physical dependence on the effect of the drug."[1]

TABLE 1.—*Data on combined use of alcohol and drugs by alcoholic patients*

Total number patients admitted for alcoholism, 139		Addicted to Drug
Patients combining alcohol and barbiturates	16	8
Patients combining alcohol, barbiturates and other drugs	10	7
Patients combining alcohol and drugs other than barbiturates	6	2
Total patients combining alcohol and drugs	32	17

TABLE 2.—*Use of drugs other than barbiturates in group of 139 alcoholic patients*

	Number of patients using
OPIATES—	
Meperidine (Demerol)	3
Morphine	2
Codeine	2
Dihydromorphinone (Dilaudid)	1
STIMULANTS—	
Racemic amphetamine (Benzedrine)	3
Dextro-amphetamine (Dexedrine)	1
OTHER DRUGS—	
Bromides	4
Paraldehyde	2
Chloral hydrate	1
Unknown	2

Within the scope of this definition, alcoholism is an addiction comparable to that which may result from the use of narcotic drugs. The patient almost always has an overpowering desire for alcoholic beverages, universally increases the frequency and amount of his drinking, and without reservation is psychically dependent on alcohol to maintain a sense of well-being. As with other types of addiction, milder forms often eventuate in increased dosages or in more rapid and effectual methods of administration or in combinations of drugs for greater effect. An alcoholic, therefore, is a potential addict to any other medication which fulfills his requirements. Barbiturates produce intoxication similar to that of alcohol and have the specific advantage of having no alcoholic odor. They are certainly more easily secreted upon the person than is a bottle of whiskey and can be taken surreptitiously with greater ease. Unfortunately, these drugs are too easily available from both legitimate and illegal sources.

The tendency of alcoholics to take other drugs is too little recognized and a physician may be too ready to prescribe addicting medications without adequate investigation. (One of the 139 patients in the present series had had as his latest prescription, before he was admitted to hospital, one for 150 pentobarbital capsules (0.1 gm. each). Furthermore, the prescription of barbiturates to an alco-

holic for the treatment of nervous tension or physical illnesses is potentially dangerous. One of the patients under treatment for hypertension had two automobile accidents while under the influence of phenobarbital but not of alcohol.

It is well known that alcoholics, like other addicts, are given to pathological lying and deceit. An unwary physician may well become the pawn of an alcoholic who has turned drug addict, as in a case in the present series, that of X, a man 51 years of age. He had constantly used alcohol to excess until 1949 when disulfiram was prescribed as an adjunct to treatment. A year later he discontinued the drug and started drinking again. In 1951 he was admitted to a state hospital with acute depression and had electroshock therapy. Within a year, he noted a gradual recurrence of depression and consulted a physician in his home town, who prescribed a combination of amobarbital and dextro-amphetamine (Dexamyl). From that time until hospital admission, there was progressive deterioration of judgment and the patient finally lost his job. He had increased the consumption of the drug to 150 to 200 tablets a week. In addition, he continued to drink heavily. It was learned that four different physicians were supplying him with drugs, each unaware that the others were doing so. In addition, he was on exceedingly good terms with several local pharmacists who thought well enough of him to refill his prescription. To further complicate the problem, many patients have a psychotic reaction at the time of withdrawal of drugs. One of the patients in the present series was transferred from another hospital. He had been hospitalized for a physical illness and drugs had been abruptly withdrawn because the attending physician was unaware of the patient's addiction. Within four days his behavior had become so bizarre that a diagnosis of acute schizophrenic reaction was made. After transfer, an interview with a relative revealed that the patient had been taking large amounts of barbiturates. He was immediately started on pentobarbital, 0.2 gm. every six hours, and within 12 hours the psychosis had cleared. There was no recurrence of symptoms during gradual withdrawal of the drug over a two-week period.

Although no attempt has been made to determine the number of patients who had grand mal seizures, this is one of the most common and potentially serious of the complications of abrupt barbiturate withdrawal. One patient in the series was a heavy drinker who also took barbiturates. During a business trip across the country he had run out of drugs. Just before reaching his destination he had a severe convulsion and fractured his jaw. In a hospital, barbiturates and anticonvulsants were administered, but within a few hours another seizure occurred, laryngeal edema developed and the patient died.

Occasionally alcoholics become seriously depressed, and of course a handy supply of barbiturates facilitates action upon an impulse to suicide. During the past year the author has treated five alcoholic patients who took large amounts of barbiturates in suicidal attempts.

Like addicts to opiate drugs, an alcoholic will, when kept from his normal daily requirements, substitute almost any other available medication. One patient, a 40-year-old woman had been previously treated for alcoholism with disulfiram as an adjunct. A few months after discharge from the hospital her relatives called, stating that she did not seem to be herself. Since leaving the hospital, she had worked in a physician's office and was able to procure barbiturates from the office supply as well as drug samples. When these did not seem to be sufficient, she took a patent medicine containing bromides. Upon readmission to the hospital, the patient was extremely drowsy; her speech was slurred and her gait staggering. Her memory, attention and judgment were poor and she was disoriented as to time, place and person. The content of bromide in the blood was 212 mg. per 100 cc.

Some patients who have first started on drugs after drinking excessively later turn to narcotics.

Less frequent than the foregoing problems are those associated with taking of stimulants. Benzedrine and Dexedrine are known for their effects on the central nervous system. They give a feeling of euphoria and an increased feeling of alertness, and prevent feelings of fatigue and sleepiness. These effects induce alcoholics to take these drugs in order to counteract the reaction to drinking.

During the past four years not a single case of paraldehyde addiction has been observed in the department of the hospital in which the author serves, although one patient in the group had previously been addicted, and another was seen in an emergency situation as a result of an overdose of paraldehyde.

It is to be noted that the alcoholic often compounds his own problems. Three of the 32 alcoholic patients who also took drugs were admitted as a result of bromide delirium. One of these patients, a man 49 years of age, had been drinking three or four quarts of beer a day for many years. He had been in the habit of taking a patent medicine containing bromides for more than 20 years. During recent months nervous tension had increased and he had taken the medicine by the "swig" instead of as directed on the bottle. It was reported that during the month before hospitalization he appeared "slowed down, was inattentive, dull, groggy, forgetful, and frequently mumbled to himself." He

was also dysarthric, ataxic, and had loss of memory for recent events. Bromide content of the blood was 244 mg. per 100 cc.

Patients who take bromides, although not within the scope of the previously cited definition of addiction, are classified as addicts by Maurer and Vogel.[4] Inclusion of two patients with bromide delirium would bring the total number of addicts in this series to 19.

DISCUSSION

Ironically, abstinence from drinking may be a curse in disguise. An alcoholic who is "dry" is always a potential candidate for addiction to other drugs. Sometimes it is extremely difficult to determine whether or not a patient is taking medications which have not been prescribed. The author has come to recognize that even small differences in muscular coordination, speech or cognitive functions may indicate that the patient is surreptitiously taking drugs. If these symptoms are evident, it is wise to question the patient carefully and perhaps consult his family. If this is not possible, the patient should be hospitalized for observation and laboratory studies to determine the cause of the symptoms.

The material in this paper might lead to the conclusion that an alcoholic should never be given sedatives for any purpose. As a general rule this may be correct. However, there are several specific exceptions.

1. Patients suffering from acute alcoholic intoxication and hangover should be given sedation for the relief of insomnia, tremulousness and gastric distress. If it is not possible to hospitalize the patient, the drugs should be carefully controlled by specific instructions to relatives. Since many alcoholics use insomnia as an excuse for drinking or taking drugs, sedatives should be withdrawn within a few days. Hospitalized patients should never be discharged until they have reestablished a normal sleep pattern without medication.

2. Nothing is more frightening to a delirious alcoholic than a sleepless night with interminable hallucinations. Such a patient also requires sedation and should continue to have it until he is free from nocturnal visitations and able to sleep for at least a few hours. Some delirious patients also require sedation during the day. Again, it is not wise to discharge the patient from the hospital until he is able to sleep well.

3. In the event an alcoholic has convulsions during the period of active drinking or hangover, he should be treated as though addicted to barbiturates. Isbell[3] worked out a very satisfactory method for the withdrawal of barbiturates from addicts, and Hargrove and co-workers[2] reported upon experience with it.

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